

CH-47 Chinook/Improved Cargo Helicopter (CH-47F)



MISSION

Transport ground forces, supplies, ammunition, and other battle-critical cargo in support of worldwide combat and contingency operations.

DESCRIPTION AND SPECIFICATIONS

As the Army's only heavy-lift cargo helicopter capable of intra-theater cargo movement of payloads greater than 9,000 lb, the CH-47 Chinook/Improved Cargo Helicopter (CH-47F) is an essential component of the Army Vision. The CH-47F program will remanufacture 300 of the current fleet of 431 CH-47D Chinook helicopters, install a new digital cockpit, and make modifications to the airframe to reduce vibration.

The upgraded cockpit will provide future growth potential and will include a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. Airframe structural modifications will reduce harmful vibrations, reducing operations and support (O&S) costs and improving crew endurance. Other airframe modifications reduce by approximately 60% the time required for aircraft tear down and build-up after deployment on a C-5 or C-17. These modifications significantly enhance the Chinook's strategic deployment capability.

A separate, but complementary effort, is the installation of more powerful and reliable T55-GA-714A engines that improve fuel efficiency and enhance lift performance by approximately 3,900 pounds. Installation of an improved crashworthy extended range fuel system (ERFS II) will enable Chinook self-deployment and extend the operational radius of all other missions. A program is also underway to reduce O&S costs through the joint development with the United Kingdom of a low-maintenance rotor hub.

Max gross weight: 50,000 lb

Max cruise speed: 170 knots/184 miles per hour

Troop capacity: 36 (33 troops plus 3 crewmembers)

Litter capacity: 24

Sling-load capacity: 26,000 lb center hook, 17,000 lb forward/aft hook, 25,000 lb tandem

Minimum crew: 3 (pilot, co-pilot, and flight engineer)

FOREIGN COUNTERPART

Russia: MI-26; United Kingdom: EH-101.

FOREIGN MILITARY SALES

Australia, Egypt, Greece, Taiwan. Direct Sales: Korea, Netherlands, Singapore, Spain, and United Kingdom.

PROGRAM STATUS

CH-47F program:

- 3QFY98 Awarded the engineering and manufacturing development (EMD) contract, slated for completion FY02.

T55-GA-714A Engine:

- 1QFY98 Commenced low-rate initial production (LRIP).
- 1QFY00 First unit equipped.
- 2QFY00 Currently fielding for the CH-47D/MH-47D/MH-47E.

Extended Range Fuel System (ERFS):

- 4QFY98 Awarded the improved ERFS II production contract. Initial deliveries were deployed in support of operations in Kosovo.
- 2QFY00 ERFS received a full materiel release.

PROJECTED ACTIVITIES**CH-47F:**

- 3QFY01 First flight (EMD).
- 3QFY03 First LRIP CH-47F delivery.
- 4QFY04 First unit equipped.

T55-GA-714A Engine:

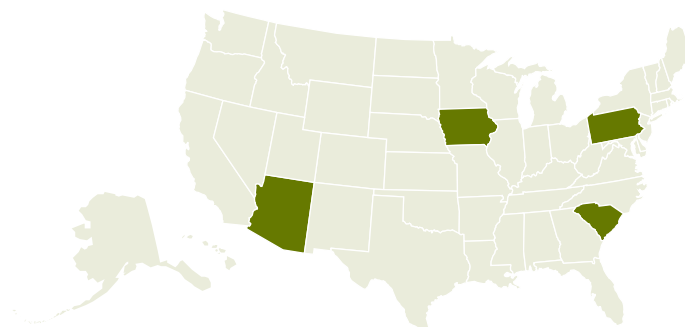
- 2QFY08 Scheduled completion.

PRIME CONTRACTORS

Engine Upgrade: Boeing (Philadelphia, PA); Honeywell (Greer, SC; Phoenix, AZ)

ERFS II: Robertson Aviation (Tempe, AZ)

Cockpit Upgrade: Rockwell Collins (Cedar Rapids, IA)



* See appendix for list of subcontractors

